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10/678,117	10/06/2003	Thomas James Doyle	61780.0001	3979
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)			
		10/678,117	DOYLE, THOMAS JAMES			
	Office Action Summary	Examiner	Art Unit			
		Heather Beegle	3609			
Period fo	The MAILING DATE of this communication app	ears on the cover sheet with the c	orrespondence address			
A SH WHI	IORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DA	ATE OF THIS COMMUNICATION	1.			
after - If No - Failu Any	ensions of time may be available under the provisions of 37 CFR 1.13 r SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period wure to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	the mailing date of this communication. D (35 U.S.C. § 133).			
Status	•					
1)⊠	Responsive to communication(s) filed on <u>06 O</u>	<u>ctober 2003</u> .				
2a)[This action is FINAL . 2b)⊠ This action is non-final.					
3)[Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.			
Disposit	ion of Claims					
4)⊠	4)⊠ Claim(s) <u>1-50</u> is/are pending in the application.					
, —	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)[
6)⊠	Claim(s) <u>1-50</u> is/are rejected.					
	Claim(s) is/are objected to.	•				
8)[]	Claim(s) are subject to restriction and/or	r election requirement.				
Applicat	ion Papers					
9)[The specification is objected to by the Examine	r.				
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)[The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.			
Priority (under 35 U.S.C. § 119					
	Acknowledgment is made of a claim for foreign All b) Some * c) None of:	priority under 35 U.S.C. § 119(a)	-(d) or (f).			
1. Certified copies of the priority documents have been received.						
	2. Certified copies of the priority documents	s have been received in Application	on No			
	3. Copies of the certified copies of the prior	•	ed in this National Stage			
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
	•					
Attachmer		<u></u>				
	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da				
3) 🔲 Infor	mation Disclosure Statement(s) (PTO/SB/08)	5) Notice of Informal P				
Pape	er No(s)/Mail Date	6) [] Other:				

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DETAILED ACTION

1. Claims 1-50 are pending in this application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1-2, 10, 12, 20-21, 25-32, 34-36, 40, 42-50 are rejected under 35 U.S.C. 102(b) as being anticipated by Bladen et al. [U.S. Pub. No. 2002/0099586].

Regarding Claim 1, A method of assessing the risk of using industrial equipment to a user thereof by preparing a risk evaluation using a program, said method comprising:

- (a) inputting to a program information relating to a plurality of risk factors; (¶ 317, 321)
- (b) causing said program to estimate a net risk of injury to said user of said industrial equipment based on said information and based on evaluation data within said program; (¶ 197, 320, Figure 12A)
- (c) said program producing a risk evaluation for said industrial equipment. (¶ 197, 354, Figure 12A)

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Regarding Claim 2, A method as claimed in claim 1

wherein one of said plurality of risk factors is based on safety characteristics of a

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particular facility in which said industrial equipment is to be used, said method

including the step of estimating a level of risk reduction based on safety

characteristics of said particular facility. (¶ 147-149)

Regarding Claim 10, A method as claimed in any one of claims 1, 2 or 3

including the step of inputting owner information into said risk evaluation. (¶ 285,

Figure 2F)

Regarding Claim 12, A method as claimed in any one of claims 1,2 or 3

wherein said industrial equipment is one piece of industrial equipment and said

method includes the steps of inputting information describing characteristics of

each hazardous area of said industrial equipment and preparing a separate risk

evaluation for each hazardous area. (¶ 147-149, 317-321)

Regarding Claim 20, A method as claimed in any one of claims 1, 2 or 3

including the step of saving said risk evaluation electronically and updating said

risk evaluation for said industrial equipment to reflect changes in any of said risk

factors. (¶ 147-149, 317-331)

Regarding Claim 21, A method as claimed in any one of claims 1, 2 or 3

wherein said program can analyze multiple points of operation on a single piece
of industrial equipment and said method includes analyzing each point of
operation separately and producing an evaluation for each point of operation on
a single piece of industrial equipment. (¶ 147-149, 317-331)

Regarding Claim 25, A method as claimed in any one of claims 1, 2 or 5

including the step of inputting information concerning an additional safety
 element relating to risk reduction. (¶ 149)

Regarding Claim 26, A method as claimed in any one of claims 1, 2 or 5

• including the step of inherently setting a probability of hazard occurrence at 100%. (¶ 328-330)

Regarding Claim 27, A method as claimed in any one of claims 1, 2 or 5

 including the step of inputting information concerning a probability of hazard occurrence. (¶ 328-330)

Regarding Claim 28, A method as claimed in any one of claims 1, 2 or 5

• including the step of inputting information concerning a probability of hazard occurrence within a range from substantially 90% to 100%. (¶ 328-330)

Regarding Claim 29, A method as claimed in any one of claims 1, 2 or 5

• including the step of inputting information concerning a probability of hazard occurrence ranging from substantially 50% to 100%. (¶ 328-330)

Regarding Claim 30, A method as claimed in any one of claims 1, 2 or 5

 including the step of inputting information concerning a probability of hazard occurrence ranging from substantially 0% to 100%. (¶ 328-330)

Regarding Claim 31, A method as claimed in any one of claims 1, 2 or 5

 including the step of inputting information concerning a probability of hazard occurrence over a broad range. (¶ 328-330)

Regarding Claim 32, A risk assessment system for use with a computer, said system assessing the risk of injury to a user from industrial equipment by preparing a risk evaluation, said system comprising:

- (a) a range of pre-determined risk values for each of a plurality of potential risk factors for which inputs are available for said industrial equipment; (¶ 317-321)
- (b) said system displaying each of said risk factors on demand and a range of inputs for a level of risk for each of said risk factors for which inputs are available; (¶ 147-149, 317-321, 328)
- (c) said system accepting an input for each risk factor

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for which inputs are available; (¶ 328)

(d) said system determining a net value for all of said inputs and producing an assessment of risk for said industrial equipment. (¶ 197, 354, Figure 12A)

Regarding Claim 34, A risk assessment system as claimed in claim 32

wherein said system produces a report setting out a risk evaluation for said industrial equipment, said system being set up to automatically determine a net value for all of said inputs and produce an assessment of risk for said industrial equipment. (Figure 8H and 12A, ¶ 197, 500-501)

Regarding Claim 35, A risk assessment system as claimed in claim 34

• wherein said report is a printable report. (Figure 8H and 12A, ¶ 197, 500-501)

Regarding Claim 36, A risk assessment system as claimed in claim 35

• wherein said report contains inputs for various risk factors. (¶ 147-149, 317-321)

Regarding Claim 40, A risk assessment system as claimed in claim 32

wherein said system requires input identifying an owner of the equipment. (¶ 285,
 Figure 2F)

Regarding Claim 42, A risk assessment system as claimed in any one of claims

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32, 33 or 34

• wherein said level of risk for each of said risk factors for which inputs are

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available are available on pop-up menus. (¶377-379)

Regarding Claim 43, A risk assessment system as claimed in any one of claims

32, 33 or 34

wherein said system permits a separate evaluation for each area of hazardous

motion of a single piece of industrial equipment. (¶ 147-149, 317-331)

Regarding Claim 44, A risk assessment system as claimed in any one of claims

32, 33 or 34,

wherein said system allows the creation of a new version or an edited version of

an existing risk assessment for said industrial equipment provided that inputs are

made clearly differentiating any new or edited version from a previous version. (¶

147-149, 317-331)

Regarding Claim 45, A risk assessment system as claimed in any one of claims

32, 33 or 34

wherein a probability of hazard occurrence is inherently set at 100%. (¶ 328-330)

Regarding Claim 46, A risk assessment system as claimed in any one of claims

32, 33 or 34

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wherein a probability of hazard occurrence has inputs over a broad range. (¶
 328-330)

Regarding Claim 47, A risk assessment system as claimed in any one of claims 32, 33 or 34

 wherein said system has inputs for a probability of hazard occurrence over a range from substantially 90% to substantially 100%. (¶ 328-330)

Regarding Claim 48, A risk assessment system as claimed in any one of claims 32, 33 or 34

 wherein said system has inputs for a probability of hazard occurrence over a range from substantially 80% to substantially 100%. (¶ 328-330)

Regarding Claim 49, A risk assessment system as claimed in any one of claims 32, 33 or 34

 wherein said system has inputs for a probability of hazard occurrence over a range from substantially 50% to substantially 100%. (¶ 328-330)

Regarding Claim 50, A risk assessment system as claimed in any one of claims 32, 33 or 34

 wherein said system has inputs for a probability of hazard occurrence over a range from substantially 0% to substantially 100%. (¶ 328-330)

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Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bladen et al. [U.S. Pub. No. 2002/0099586] as applied to claim 2 above, and further in view of Melby et al. [U.S. Pat. No. 6,952,680].

Regarding Claim 3, Bladen et al. discloses, A method as claimed in claim 2.

Regarding Claim 3, Bladen et al. fails to disclose,

 including the step of repeating the method for various pieces of industrial equipment, the risk evaluation being produced automatically.

Regarding Claim 3, Melby et al. discloses,

 including the step of repeating the method for various pieces of industrial equipment, the risk evaluation being produced automatically. (Abstract)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Melby et al. in the device of Bladen et al., in order to maximize efficiency (Abstract from Melby et al.).

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6. Claim 4, 23, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bladen et al. [U.S. Pub. No. 2002/0099586] as applied to claim 2 above, and further in view of Masch [U.S. Pat. No. 5,930,762].

Regarding Claim 4, Melby et al. discloses, A method as claimed in claim 2.

Regarding Claim 4, Melby et al. fails to disclose,

 including the step of inputting information of risk factors that increase risk together with risk factors that reduce risk.

Regarding Claim 4, Masch discloses,

 including the step of inputting information of risk factors that increase risk together with risk factors that reduce risk. (Col. 14, lines 35-60)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Masch in the device of Bladen et al., in order to aid decision-makers in selecting a good and risk-protected implementable strategy (Abstract from Masch).

Regarding Claim 23, Masch further discloses, A method as claimed in claim 4

• including the step of inputting information by estimating a risk of injury to said user based on characteristics of said industrial equipment as if no guarding has been installed on said industrial equipment. (Col. 20, lines 60-66)

Regarding Claim 24, Masch further discloses, A method as claimed in claim 4

• including the step of inputting information by estimating a level of risk reduction based on safety features for said industrial equipment. (Col. 20, lines 60-66)

7. Claims 5-9, 13-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masch [U.S. Pat. No. 5,930,762] as applied to claim 4 above, and further in view of Bladen et al. [U.S. Pub. No. 2002/0099586].

Regarding Claim 5, Masch discloses, A method as claimed in claim 4.

Regarding Claim 5, Masch fails to disclose,

 including the steps of inputting information by estimating a risk of injury to said user based upon characteristics of said industrial equipment and estimating a level of risk reduction based upon safety features for said industrial equipment.

Regarding Claim 5, Bladen et al. discloses,

including the steps of inputting information by estimating a risk of injury to said
user based upon characteristics of said industrial equipment and estimating a
level of risk reduction based upon safety features for said industrial equipment. (¶
320)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Bladen et al. in the device of Masch, in order to monitor the control measures. (¶ 321 from Bladen et al.)

Regarding Claim 6, Bladen et al. further discloses, A method as claimed in claim 5

• including the steps of inputting to a program information relating to a plurality of risk factors by operating said program to produce several risk factors, each risk factor for which an input is available having a range of risk, selecting a level of risk from said range of risk for each factor that is applicable to said industrial equipment, said program estimating a net risk of injury to said user based upon said selections. (¶ 147-149, 317-321)

Regarding Claim 7, Bladen et al. further discloses, A method as claimed in claim 5

including the step of printing the risk evaluation for said industrial equipment.
 (Figure 8H and 12A, ¶197, 500-501)

Regarding Claim 8, Bladen et al. further discloses, A method as claimed in claim 5

wherein each possible risk factor for which an input is available has at least three
selections ranging from minor to major and said method includes the steps of
inputting a selection for each risk factor that is applicable to said industrial
equipment. (¶ 147-149, 317-321)

Regarding Claim 9, Bladen et al. further discloses, A method as claimed in claim 5

wherein each risk factor for which an input is available has four selections
 ranging from minor to major and said method includes the steps of inputting a

selection for each risk factor that is applicable to said industrial equipment. (¶ 147-149, 317-321)

Regarding Claim 13, Bladen et al. further discloses, A method as claimed in claim 5

including the step of estimating a risk of injury to said user based upon
 characteristics of said industrial equipment as if no guarding has been installed
 on said industrial equipment. (¶ 147-149, 317-321)

Regarding Claim 14, Bladen et al. further discloses, A method as claimed in claim 5

• including the step of evaluating a probability of a risk factor of injury occurrence by inputting a level of risk for a risk factor severity of potential injury, a level of risk for a risk factor frequency of exposure and a level of risk for a risk factor possibility of hazard avoidance, there being no separate input for said probability of hazard occurrence. (¶ 147-149, 317-321)

Regarding Claim 15, Bladen et al. further discloses, A method as claimed in claim 5

including the step of estimating a level of risk reduction based on safety features
for said industrial equipment by inputting a level of risk for primary safety
elements based on mechanical devices or, alternatively, inputting a level of risk

for primary safety elements based upon risk reduction methods that are passive in nature. (¶ 147-149, 317-321)

Regarding Claim 16, Bladen et al. further discloses, A method as claimed in claim 15

 where said program permits inputting a level of risk for only one of the primary safety elements. (¶ 147-149, 317-321)

Regarding Claim 17, Bladen et al. further discloses, A method as claimed in claim 5.

• wherein the step of estimating a level of risk based on safety characteristics of a particular facility in which the industrial equipment is to be used includes the steps of inputting levels of risk for a nature of person exposed to a hazardous area and personal protective equipment worn by persons who are present at or near said industrial equipment from time to time. (¶ 147-149, 317-321)

Regarding Claim 18, Bladen et al. further discloses, A method as claimed in claim 5

 wherein the risk estimation includes an evaluation of risk for a probability of hazard occurrence, said method including the step of evaluating a level of risk from said range of risk for risk factors comprising said probability of hazard occurrence. (¶ 147-149, 317-321)

Regarding Claim 19, Bladen et al. further discloses, A method as claimed in claim 5

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wherein said safety characteristics of said particular facility include a range of risk
for a nature of exposed person, qualifications of exposed person, personal
protective equipment and workplace safety policy and said method includes the
steps of selecting a level of risk from each range of risk for each risk factor. (¶
147-149, 317-321)

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bladen et al. [U.S. Pub. No. 2002/0099586] as applied to claim 1 above, and further in view of Bly et al. [US 2002/0087345]

Regarding Claim 11, Bladen et al. discloses, A method as claimed in any one of claims 1, 2 or 3.

Regarding Claim 11, Bladen et al. fails to disclose,

 including the step of inputting equipment identification information into said risk evaluation.

Regarding Claim 11, Bly et al. discloses,

 including the step of inputting equipment identification information into said risk evaluation. (¶ 36)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Bly et al. in the device of Bladen et al., in order to maximize productivity and to reduce operating costs and administrative burdens.

(Abstract from Bly et al.)

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9. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bladen et al. [U.S. Pub. No. 2002/0099586] as applied to claim 1 above, and further in view of Taylor et al. [U.S. Pat. No. 6,292,830].

Regarding Claim 22, Bladen et al. discloses, A method as claimed in any one of claims 1, 2 or 3.

Regarding Claim 22, Bladen et al. fails to disclose,

 wherein said program allows more than one version of a risk evaluation for said industrial equipment and said method includes the step of creating a new version of a risk evaluation or editing an existing version of a risk evaluation and inputting reasons for creating each version.

Regarding Claim 22, Taylor et al. discloses,

 wherein said program allows more than one version of a risk evaluation for said industrial equipment and said method includes the step of creating a new version of a risk evaluation or editing an existing version of a risk evaluation and inputting reasons for creating each version. (Col. 95, lines 50-67, Col. 96, lines 1-10)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Taylor et al. in the device of Bladen et al., in order to allow the system to learn from feedback. (Col. 95, lines 40-50 from Taylor et al.)

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10. Claim 33, 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Bladen et al. [U.S. Pub. No. 2002/0099586] as applied to claim 32 above, and further in

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view of Masch [U.S. Pat. No. 5,930,762].

Regarding Claim 33, Bladen et al. discloses, A risk assessment system as claimed in

claim 32

Regarding Claim 33, Bladen et al. fails to disclose,

• wherein one of said risk factors is a level of risk reduction based on safety

characteristics of a particular facility in which said industrial equipment is to be

used.

Regarding Claim 33, Masch discloses,

wherein one of said risk factors is a level of risk reduction based on safety

characteristics of a particular facility in which said industrial equipment is to be

used. (Col. 14, lines 35-60)

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to provide the teachings of Masch in the device of Bladen et al., in order to

aid decision-makers in selecting a good and risk-protected implementable strategy

(Abstract from Masch).

Regarding Claim 37, Bladen et al. discloses, A risk assessment system as claimed in claim 32.

Regarding Claim 37, Bladen et al. fails to disclose,

 wherein the risk factors relate to risk of injury based on characteristics of said industrial equipment and a level of risk reduction based on safety elements.

Regarding Claim 37, Masch discloses,

wherein the risk factors relate to risk of injury based on characteristics of said industrial equipment and a level of risk reduction based on safety elements. (Col. 14, lines 35-60, Col. 20, lines 60-66)

11. Claim 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masch [U.S. Pat. No. 5,930,762] as applied to claim 37 above, and further in view of Bladen et al. [U.S. Pub. No. 2002/0099586].

Regarding Claim 38, Masch discloses, A risk assessment system as claimed in claim 37.

Regarding Claim 38, Masch fails to disclose,

 wherein said risk factors further relate to a level of risk reduction based on a location where said equipment is to be installed.

Regarding Claim 38, Bladen et al. discloses,

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 wherein said risk factors further relate to a level of risk reduction based on a location where said equipment is to be installed. (¶ 147-149)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Bladen et al. in the device of Masch, in order to monitor the control measures. (¶ 321 from Bladen et al.)

Regarding Claim 39, Masch discloses, A risk assessment system as claimed in claim 37.

Regarding Claim 39, Masch fails to disclose,

 wherein said risk factors further relate to a level of risk reduction based on safety characteristics of a particular facility in which said industrial equipment is to be used.

Regarding Claim 39, Bladen et al. discloses,

- wherein said risk factors further relate to a level of risk reduction based on safety characteristics of a particular facility in which said industrial equipment is to be used. (¶ 147-149)
- 12. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bladen et al. [U.S. Pub. No. 2002/0099586] as applied to claim 40 above, and further in view of Bly et al. [US 2002/0087345]

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Regarding Claim 41, Bladen et al. discloses, A risk assessment system as claimed in claim 40.

Regarding Claim 41, Bladen et al. fails to disclose,

 wherein said system requires input relating to an identification of the industrial equipment.

Regarding Claim 41, Bly et al. discloses,

• wherein said system requires input relating to an identification of the industrial equipment. (¶ 36)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Bly et al. in the device of Bladen et al., in order to maximize productivity and to reduce operating costs and administrative burdens.

(Abstract from Bly et al.)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heather Beegle whose telephone number is (571) 270-3333. The examiner can normally be reached on Monday Thru Thursday, 7:30 am to 5:00 pm eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Akm Ullah can be reached on (571) 272-2361. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HB

AKM ULLAH
SUPERVISORY PATENT EXAMINER

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